

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION N
10/604,459	07/23/2003	Alan E. Stein	ITW7510.054	1458
33647 7	7590 07/19/2005		EXAMINER	
	KI PATENT SOLUTION I CEDARBURG ROAD	KERNS, KEVIN P		
MEQUON, W			ART UNIT	PAPER NUMBER
			1725	

DATE MAILED: 07/19/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

		Application No.	Applicant(s)				
Office Action Summary		10/604,459	STEIN ET AL.				
		Examiner	Art Unit				
		Kevin P. Kerns	1725				
Period fo	The MAILING DATE of this communication a or Reply	appears on the cover sheet wi	th the correspondence ad	dress			
THE - External after representation of the second representation of the se	IORTENED STATUTORY PERIOD FOR REF MAILING DATE OF THIS COMMUNICATION ensions of time may be available under the provisions of 37 CFR of SIX (6) MONTHS from the mailing date of this communication. The period for reply specified above is less than thirty (30) days, a reply period for reply is specified above, the maximum statutory period to reply within the set or extended period for reply will, by state reply received by the Office later than three months after the managed patent term adjustment. See 37 CFR 1.704(b).	1.136(a). In no event, however, may a receptly within the statutory minimum of thirty od will apply and will expire SIX (6) MON tute, cause the application to become AB	eply be timely filed y (30) days will be considered timely THS from the mailing date of this co ANDONED (35 U.S.C. § 133).				
Status							
1)	Responsive to communication(s) filed on 17	' May 2005.					
2a)⊠							
3)	Since this application is in condition for allow		ers, prosecution as to the	e merits is			
•	closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.						
Disposit	ion of Claims		*				
4)🖂	Claim(s) 24-43 is/are pending in the application	tion.					
,	4a) Of the above claim(s) is/are withdrawn from consideration.						
5)□	Claim(s) is/are allowed.		\ \.\.\.\.\.\.\.\.\.\.\.\.\.\.\.\.\.\.\				
6)🖂	☑ Claim(s) <u>24-43</u> is/are rejected.						
7)	Claim(s) is/are objected to.						
8)□	Claim(s) are subject to restriction and	d/or election requirement.					
Applicat	ion Papers	•					
9)🖂	The specification is objected to by the Exami	iner.					
· <u></u>	The drawing(s) filed on 23 July 2003 and 17		pted or b) objected to t	ov the Examiner.			
,	Applicant may not request that any objection to the						
	Replacement drawing sheet(s) including the corr			FR 1.121(d).			
11)	The oath or declaration is objected to by the		· ·	` '			
Priority (under 35 U.S.C. § 119						
	Acknowledgment is made of a claim for forei All b) Some * c) None of: 1. Certified copies of the priority docume 2. Certified copies of the priority docume 3. Copies of the certified copies of the priority docume application from the International Bure	ents have been received. ents have been received in Apriority documents have been	pplication No	 Stage			
	See the attached detailed Office action for a li	ist of the certified copies not .	received.				
Attachmen	• •	🗀 -		•			
_	ce of References Cited (PTO-892) ce of Draftsperson's Patent Drawing Review (PTO-948)		ummary (PTO-413) s)/Mail Date				
3) 🔲 Infor	mation Disclosure Statement(s) (PTO-1449 or PTO/SB/0er No(s)/Mail Date		nformal Patent Application (PTC)-152)			

DETAILED ACTION

Specification

1. The disclosure is objected to because of the following informalities: in amended paragraph [0027], 12th line, replace "32" with "36" after "work piece". Appropriate correction is required.

Double Patenting

2. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970);and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

3. Claims 24-43 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-23 of copending Application No. 10/605,546. Although the conflicting claims are not identical, they are not patentably distinct from each other because the claims include at least the following common features: a welding torch configured to present an electrode to a weld; an enclosure (welder housing); a power conditioner (power source/supply) disposed within the enclosure; a cooling system having a coolant tank and a spout

disposed within the enclosure to circulate coolant through the welding torch/component via coolant hoses (providing supply and return paths for the coolant); a controller operable to control the cooling system and power conditioner; a means to automatically commence coolant circulation through the torch when the electrode is presented to the weld; a means to maintain coolant circulation until expiration of a specific time period and until a temperature falls below a certain value; a heat exchanger and water pump assembly; and at least one check valve integrated with the cooling system. One of ordinary skill in the art would have recognized that the welder enclosure defined by a base plate, a pair of side plates, a pair of end plates, and a top cover would also be present for the welding-type system of copending Application No. 10/605,546, as it is necessary for the internal components of the welder to be accessible for repairs.

This is a <u>provisional</u> obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claim Rejections - 35 USC § 112

- 4. The following is a quotation of the first paragraph of 35 U.S.C. 112:
 - The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.
- 5. Claims 24-33 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to

one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

With regard to amended independent claim 24, the new claim limitation "<u>dump</u> for coolant" lacks support in the originally filed specification, and is thus considered to be new matter. Furthermore, the applicants have not set forth the criticality of this new matter limitation in the originally filed specification.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 7. Claims 24-43 are rejected (see complete translation of the French text) under 35 U.S.C. 102(b) as being anticipated by Prunier (FR 2 536 320).

Prunier discloses an arc welding machine that includes a refrigeration unit for torch cooling, in which the welding machine further includes a welding torch configured to present an electrode to a weld; an enclosure (welder housing) with a base plate, side plates, end plates, and a top cover; a power conditioner (power source/supply) disposed within the enclosure; a cooling system having a coolant tank and a spout disposed within the enclosure to circulate coolant through the welding torch/component via coolant hoses (providing supply and return paths for the coolant); a controller operable

Application/Control Number: 10/604,459

Art Unit: 1725

to control the cooling system and power conditioner; a means to automatically commence coolant circulation through the torch when the electrode is presented to the weld; a means to maintain coolant circulation until expiration of a specific time period and until a temperature falls below a certain value; a heat exchanger and water pump assembly (enabling recycled supply -- both a source and dump for coolant); and at least one check valve integrated with the cooling system (abstract; translation of French text of specification and claims; and Figure).

8. Claims 34-43 are rejected under 35 U.S.C. 102(b) as being anticipated by Srba (US 4,942,281).

Srba discloses multi-torch interface assembly for inert gas TIG welding, in which the welding machine further includes multiple welding torches configured to present an electrode to a weld; an enclosure (welder housing) with a base plate, side plates, end plates, and a top cover; a power conditioner (power source/supply) disposed within the enclosure; a cooling system having a coolant tank (manifold), and a spout disposed within the enclosure to circulate coolant through the welding torch/component via coolant hoses (providing supply and return paths for the coolant); a controller operable to control the cooling system and power conditioner; a means to automatically commence coolant circulation through the torch when the electrode is presented to the weld; a means to maintain coolant circulation until expiration of a specific time period and until a temperature falls below a certain value; a heat exchanger and water pump assembly; and at least one check valve integrated with the cooling system (abstract;

column 2, line 42 through column 4, line 61; column 5, line 35 through column 10, line 47; and Figures 1-6).

Response to Arguments

- 9. The examiner acknowledges the applicants' amendment and replacement drawing sheets received by the USPTO on May 17, 2005. The amendments and replacement drawing sheets overcome prior objections to the drawings, abstract, specification, and claim 31. A minor specification objection remains (see paragraph 1). Provisional double patenting rejections remain (see paragraph 3). A new rejection under 35 USC 112, 1st paragraph has been raised by the amendment (see paragraph 5). The applicants' amendment to claim 24 overcomes the 35 USC 102(b) rejections based on the Srba reference as it applies to claims 24-33 (since Srba has no coolant tank disposed within the same welder housing enclosure as the power conditioner). Claims 24-43 remain under consideration in the application.
- 10. Applicants' arguments filed May 17, 2005 have been fully considered but they are not persuasive.

With regard to the applicants' remarks/arguments on pages 10-13 of the response, the applicants are referred to paragraph 10 of the prior Office Action (paragraph 7 in this Office Action) to show that the 35 USC 102(b) rejections based on Prunier (FR 2 536 320) was not a result of reliance solely upon the abstract. The "French text of specification and claims; and Figure" are also cited at the end of the

Application/Control Number: 10/604,459

Art Unit: 1725

paragraph. It is noted that a complete translation of a foreign document can take up to several weeks to obtain (in this instance about 4 weeks from the Office Action writing date of March 19, 2005 and mailing date of March 24, 2005 -- with the examiner's request for translation date being March 21, 2005). In the future, it is kindly requested that the applicants employ their resources to obtain a complete translation of pertinent foreign documents upon receipt of first and/or subsequent Office Actions to enable a complete reply and hasten prosecution history. However, a complete translation of the French document (which was finally obtained on April 20, 2005) is enclosed with this Office Action. In contrast to the applicants' remarks at the bottom of page 10, the French document includes the limitations of independent claims 24, 34, and 40 – see translation of French text and the newly underlined portion of paragraph 7. Prunier also discloses that the power conditioner and cooling system is commonly enclosed, in contrast to what the applicants have stated in the last 3 lines of page 10 of their response. Regarding the Srba reference, the applicants are kindly referred to paragraph 8, which continues to include limitations provided in independent claims 34 and 40. Although the rejections of claims 24-33 have been withdrawn due to the applicants' amendment that includes providing the "coolant tank disposed within the enclosure", the examiner respectfully asserts that at least a portion of the "cooling system" is disposed within the enclosure. With regard to independent claim 40 (in response to the applicants' remarks on the bottom of page 13), in particular the newly amended limitation of the check valve that is "biased to a closed bias position" and "configured to automatically overcome the closed bias position...", both references are

Application/Control Number: 10/604,459

Art Unit: 1725

inclusive of valves that are able to be manipulated by hand and by automatic control. Even if "automatic" control would not be specifically disclosed in the prior art references, the ability for an element to be "automatic" is not a patentable feature by itself, as it has been held that providing a mechanical or automatic means to replace manual activity which has accomplished the same result involves only routine skill in the art. In re Venner, 120 USPQ 192. As a result, all of independent claims 24, 34, and 40 (and claims dependent therefrom) do not patentably distinguish over Prunier and/or Srba.

Conclusion

11. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dr. Kevin P. Kerns whose telephone number is (571)

272-1178. The examiner can normally be reached on Monday-Friday from 8:00am-

5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tom Dunn can be reached on (571) 272-1171. The fax phone number for

the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free).

Kevin P. Kerns Kivin Kems 7/17/05

Primary Examiner Art Unit 1725

KPK kpk

July 17, 2005